Chapter 5 EXPLOSIVE MISHAP OR CONVENTIONAL ORDNANCE DEFICIENCY REPORTING PROCEDURES REPORT SYMBOL DD-FM&P(AR) 1020(5102) (MIN: CONSIDERED)

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501. GENERAL

- a. This chapter provides guidance for the reporting of explosive mishaps and conventional ordnance deficiencies.
- b. This chapter also covers the exchange of information among DOD components as required by reference (g). The information includes reports of accidents, incidents, and any other safety related occurrences during the Research, Development, Test and Engineering Phase, or Production Phase that could adversely affect the Production Base. A Production Base is defined as a DOD activity or contractor that manufactures or produces explosive items, i.e., Weapons Stations, Ordnance Stations or laboratories.
- c. There is a high potential for mishaps involving explosives; therefore, the requirements for reporting explosive mishaps are more stringent than for other kinds of mishaps. This chapter establishes the requirements and procedures for reporting all mishaps and deficiencys involving non-nuclear explosives and chemical agents.
- d. The Joint Data Bank for incidents affecting the Production Base is maintained by the U.S. Army Materiel Command Field Safety Activity (AMCFSA).

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502. **DEFINITIONS**

- a. Explosive Mishaps. An explosive incident or dangerous defect involving an explosive system or launch device, which results in a detonation, deflagration, burning, inadvertent jettison or release of ordnance material resulting in damage, death or injury.
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- b. <u>Conventional Ordnance Discrepancy</u>. A recognized malfunction or defect of an explosive/weapon system, launch device, which if not corrected could result in injury to personnel, an explosive mishap, damage to or loss of facilities or equipment.
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- c. Explosive Material. A chemical, or a mixture of chemicals, which undergoes a rapid chemical change (with or without an outside supply of oxygen) liberating large quantities of energy in the form of blast, light, and/or hot gases. Incendiary materials and certain fuels and oxidizers

which can be made to undergo a similar chemical change are also considered explosive materials. Examples of explosive materials include:

- (1) Explosives. TNT, Compositions, Explosive D, Tetryl, Fulminate of Mercury, Black Powder, Smokeless Powder, Rocket and Missile Propellant.
- (2) Fuels and Oxidizers. OTTO Fuel, Mixed Amine Fuel, Inhibited Red Fuming Nitric Acid, Ethylene Oxide, etc.
- (3) Incendiaries. Napalm, Magnesium, Thermite, Pyrotechnics, etc.
- d. Explosive Systems. A weapon, device, or tool using explosive materials. For the purpose of this instruction, an explosive system also includes its components and the operationally adjacent mechanisms. Examples of explosive systems are: projectiles, bombs, missiles, rockets, targets using explosive material, mines, torpedoes, grenades, charges, rounds, CADs, explosively operated stud drivers, flares, and smoke grenades.
- e. <u>Chemical Agent</u>. A chemical compound intended for use in military operations, to kill, seriously injure, or incapacitate persons through its chemical properties. Excluded are riot control agents, chemical herbicides, smoke and flames, pesticides, and industrial chemicals unrelated to chemical warfare purposes.

503. EXPLOSIVE MISHAPS

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- R) a. <u>Reportable</u>. The following events are reportable using the format in Appendix B. Use "Explosive Mishap Report" in the subject line.
- R) (1) <u>Detonation/Deflagration/Burning</u>. An unintentional or inadvertent initiation, explosion or reaction of an explosive material, component or system.
- R) (2) <u>Inadvertent Launch</u>. An unintentional or inadvertent release, jettisoning, or launching of a weapon, weapon pod, etc.
- R) (3) <u>Dangerous Defects</u>. An observed defect in an explosive system such as ruptures of explosive containers, protruding primers, exudation, or cracked grains, etc.
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- A) (4) <u>Inadvertent Arming</u>. The unintentional or inadvertent arming of an explosive component or weapon.

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(5) Other

- (a) A projectile, missile, rocket, etc., that impacts off-range.
- (b) Injury which meets the definition of a lost (A time case as defined in paragraph 301a(2).
- (6) <u>Chemical Agent Release</u>. Any unintentional or uncontrolled release of a chemical agent when:
- (a) Damage occurs to property from contamination, or costs are incurred for decontamination.
- (b) Individuals exhibit physiological symptoms of agent exposure.
- (c) The agent quantity released to the atmosphere is such that a serious potential for exposure is created.

503.1 CONVENTIONAL ORDNANCE DEFICIENCY

- a. Reportable. The following events are reportable as conventional ordnance deficiencies using the format in Appendix B. Use "Conventional Ordnance Deficiency Report" in the subject line.
- (1) <u>Malfunctions</u>. The failure of an explosive component or weapon to function in the manner in which designed; such as failure to launch, premature reactions, duds, etc.
- (2) <u>Improper Handling</u>. Incidents involving human error and/or supporting equipment malfunction involving explosive materials, components, or weapons, during any part of its logistic cycle, resulting in a dropped or damaged item. Ensure that a Personnel Error is identified as "Discovered" (mishap not caused by the reporting activity, i.e., damaged caused by another but not discovered until inspection, test, etc., at reporting activity) or "Induced" (error caused in some manner at the reporting activity) in Appendix B narrative.
- (3) Observed Defect. An observed defect to a weapon/weapon system which does not meet criteria of a dangerous defect; such as dented containers, cracked missile/warheads, incorrect packaging, etc. Ensure that the observed defect is identified as "Discovered" (mishap not caused by the reporting activity, i.e., damage caused by another but

not discovered until inspection, test, etc., at reporting activity) or "Induced" (Defect caused in some manner at the reporting activity) in Appendix B narrative.

- A) (4) <u>Personnel Error</u>. Human errors in processing, assembling, testing, loading, storing, transporting, etc. It includes the misuse or unauthorized alteration of an explosive system, as well as the loss or abandonment of an explosive system which could cause a potential hazard to untrained personnel. Ensure that an Personnel Error is identified as "Discovered" (mishap not caused by the reporting activity, i.e., damage caused by another but not discovered until inspection, test, etc., at reporting activity) or "Induced" (error caused in some manner at the reporting activity) in Appendix B narrative.
- A) (5) Other
- A) (a) An event which except for chance, would have been an explosive mishap.
- A) (b) Any failure or malfunction of, or damage to a launch device or associated hardware resulting in a hazardous condition when dummy, exercise or explosive material is being handled or otherwise manipulated.
- A) (c) Unusual or unexpected occurrences, unnatural phenomena, unfavorable environments, or instances of equipment failure which may damage or affect safety of an explosive material or system. (It includes HERO sensitive explosive systems exposed to RADHAZ environments.)
- A) (d) The failure of a missile or explosive system to test, calibrate, or otherwise meet preloading or prelaunch requirements, i.e., failure of BIT.
- A) (e) The potential for personnel injury exists from a malfunction, improper handling, etc.
- A) (d) Use of Explosive Ordnance Disposal (EOD) services when military explosives are involved for other than routine disposal of explosives.
- A) b. Exceptions
- A) (1) OPNAVINST 8600.2A (NOTAL). (Naval Airborne Weapons Maintenance Program). Mishaps or discrepancies occurring during airborne weapon systems and equipment operations, including armament supporting equipment (any

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equipment which is used in the <u>loading/unloading</u> of an explosive system or launch device on an aircraft), will be reported as prescribed by OPNAVINST 8600.2A (NOTAL) and not this instruction.

NOTE: Mishaps or discrepancies involving <u>weapons support</u> <u>equipment</u> (any equipment or device used in the manufacture, test, assembly, handling, and transportation of any explosive system or launch device) will be reported under this instruction.

- (2) <u>OPNAVINST 3100.6E</u>. Nuclear weapons mishaps and incidents are to be reported as prescribed by OPNAVINST 3100.6E (NOTAL) and JCS Publication 6 (NOTAL) and not per this instruction.
- (3) Marine Corps Order 8025.1B (NOTAL). U.S. Marine Corps activities are exempt from reporting per this instruction if Report Symbol DN 8025-02 is submitted as prescribed by Marine Corps Order 8025.1B (NOTAL) which applies to Class V(W) ammunition.
- (4) Common Carriers/Government Vehicles. Explosive mishaps which occur while an explosive material or system is in the hands of a common (commercial) carrier will be reported as prescribed by NAVSEA OP 2165, Volume I (NOTAL), and not this instruction. However, explosive mishaps involving transportation by common carrier/government motor vehicles or railroads which occur on board a naval installation require reporting by both NAVSEA OP 2165 and this instruction.

504. POST-MISHAP ACTION

- a. The activity experiencing the mishap shall:
- (1) Discontinue the use of the item, lot, or batch involved pending guidance from higher authority.
- (2) Initiate the reporting procedure required by Chapter 2.
- (3) Accurately and expeditiously respond to requests for additional information.
- b. Depending on the severity of the explosive mishap or deficiency, appropriate action will be required by various other Navy commands and activities to assure that the actual cause has been identified and steps taken to assure that future similar mishaps do not occur. For example:

OPNAVINST 5102.1C CH-1 22 May 90

- (1) NAVSAFECEN together with other activities may conduct a mishap investigation.
- (2) Commander, Naval Sea Systems Command, Commander, Naval Air Systems Command, or Commandant, U.S. Marine Corps may designate all related explosive systems as unserviceable, direct follow-up tests and evaluation of various lots to identify defective hardware, or initiate procedural changes in the use of the weapon system.
- R) (3) Ships Parts Control Center shall support the above command decisions regarding disposition and use of defective or questionable parts by issuing a Notice of Ammunition Reclassification (NAR).
- R) (4) NAVSAFECEN will enter all relevant information into a computerized Data Bank.

505. REPORTING PROCEDURES

- a. <u>Responsibility</u>. The commanding officer, officer in charge, or master shall require the investigation and reporting of all reportable explosive mishaps occurring within their command or involving personnel attached to their command.
- (1) <u>Special Cases</u>. When a report under this instruction is required solely as the result of Explosive Ordnance Disposal service (paragraph 503a(6)(e)), the responsibility for submitting the report rests with the following in the order given:
 - (a) The Navy activity requesting EOD services;
- (b) The Navy activity which has operational control of the EOD personnel rendering the service; or
- (c) In cases not covered by (a) or (b) above, the EOD group to which the EOD personnel are permanently attached.
- (d) If EOD units respond in an explosive mishap, ensure the appropriate EOD units are information addressees.

b. Submission of Reports

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- (1) <u>General</u>. Reports are to be unclassified (FOR OFFICIAL USE ONLY), unless inclusion of classified material is essential.
- (2) <u>Message Reports</u>. A message report as described in Appendix B is required for all explosive mishaps. The report will be submitted in addition to any reports required by other directives (e.g., NWP-7 (NOTAL), MILPERSMAN, etc.).
- (a) <u>OPREP-3</u> <u>Reports</u>. When an explosive mishap meets the criteria for reporting under the OPREP-3 system, then the explosive mishap message report need not be <u>initially</u> submitted if the initial OPREP-3 report includes as much information as known and is submitted to the addressees shown in Appendix B. The remaining information required will be transmitted by the explosive mishap report within 24 hours. NOTE: The submission of an OPREP-3 report <u>does not</u> alleviate the requirements for an explosive mishap report.
- (b) <u>CASREPS</u> (<u>Casualty Summary Reports</u>). Reporting an explosive mishap as a <u>CASREP</u> does not relieve the experiencing activity from submitting the explosive mishap report per this instruction.
- (c) Immediate Message/Telephone Report. A report will be made by immediate message and, when circumstances permit, by telephone within 24 hours, for all reportable explosive mishaps in the following categories:
- 1. A fatality or inpatient hospitalization of five or more civilian or military personnel;
- 2. \$200,000 or more material property (R damage;
- 3. Production interruption which exceeds or will exceed 72 hours;
- 4. Significantly degraded operational capability;
 - 5. Probable high public interest; or
- 6. Immediate danger exists at the activity involved or could exist at other activities.

OPNAVINST 5102.1C CH-1 22 May 90

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NOTE: The telephone report shall be made to the following:

During normal working hours of the Washington DC area:
CNO (OP-410) - AUTOVON 225-7093 - Commercial (202) 695-7093
COMNAVSEASYSCOM (SEA-665) - AUTOVON 332-2080 - Commercial
(703) 602-2080

COMNAVAIRSYSCOM (AIR-09E) - AUTOVON 222-1234 - Commercial (202) 692-1234

NAVSAFECEN (Code 43) - AUTOVON 564-3343 - Commercial (804) 444-3343 (24 hour recording)

(Only if action addressee on message report)

Outside of normal working hours of Washington, DC area: CNO (Navy Department Duty Captain) - AUTOVON 225-0231 -Commercial (202) 695-0231

COMNAVSEASYSCOM (Watch Officer) - AUTOVON 332-7527 - Commercial (703) 602-7527

COMNAVAIRSYSCOM (Duty Officer) - AUTOVON 222-1666 - Commercial (202) 692-1666

NAVSAFECEN (Duty Officer) - AUTOVON 564-3520 - Commercial (804) 444-3520

(Only if action addressee on message report)

- (d) <u>Supplementary Reports</u> shall be submitted as soon as the mishap investigation has been completed to provide information which was unknown at the time of submission of the initial report or to correct information submitted in the initial report. All supplementary reports shall be released within seven days of the initial report. For Production Base, supplemental reports are required as soon as additional information becomes available.
- R) (e) A <u>routine explosive mishap message report</u> will be submitted within 24 hours for all explosive mishaps in the following categories:
 - 1. \$10,000 or more property damage;
 - 2. Production interruption exceeding 24

hours;

3. Individuals exhibiting physiological symptoms of agent exposure; or

- 4. An unintentional or uncontrolled release of chemical agent where the agent quantity released to the atmosphere is such that a serious potential from exposure is created; or
- $\underline{5}$. Injury which meets the definition of a lost time case as defined in paragraph 301a(2).

- (f) A <u>message report</u> will be submitted within 20 (R calendar days for all other explosive mishaps or deficiencies.
- (3) Reports to the Department of Defense Explosives
 Safety Board (DDESB). DOD Instruction 6055.7 of 10 April
 1989 (NOTAL) requires each DOD component to submit reports to
 DDESB for mishap involving ammunition, explosives, and
 chemical agents and systems. In compliance, CNO (OP-410) is
 hereby designated the central Navy office responsible for
 assuring accomplishment of the required reporting and
 investigation, and the point of contact between DDESB and
 Navy activities in regard to those matters.
- (4) <u>Dissemination of Information</u>. Each Navy/Marine A) Corps major command receiving ammunition accident and incident reports shall disseminate the data to appropriate personnel and tenants within their purview.

NOTE: <u>Use of this report</u>. For any questions on the use of this report, call the Naval Safety Center, Norfolk, VA, AUTOVON 564-3342; Commercial (804) 444-3342.